

Executive Summary

Analysis of Pennsylvania Crash Statistics Data

By:

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In 2015, 1,200 Pennsylvanians died in reported motor vehicle crashes and another 80,004 were injured. A disproportionate number of traffic fatalities in relation to the population occurs in rural areas of Pennsylvania and nationwide.

This research analyzed vehicle crashes in Pennsylvania to determine if there are any differences in the number or severity of crashes between rural and urban Pennsylvania. The researchers analyzed vehicle crash data from 2010-2015 from the Pennsylvania Department of Transportation to examine the demographic profiles and causes of crashes for individuals in Pennsylvania by age group and gender, by rural and urban municipality, and by proximity to emergency service providers, local police, Pennsylvania State Police stations, hospitals, and trauma center hospitals in Pennsylvania.

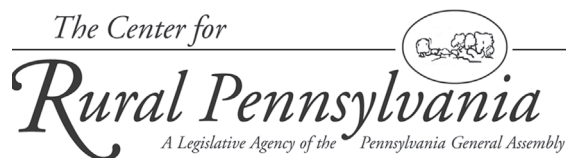
The research results indicated that:

- In Pennsylvania, 28.9 percent of all reported crashes resulting in injuries and fatalities occur in rural areas: of these, 46.5 percent result in fatalities and 37.7 percent result in major injuries.

- Rural areas have a higher share of crashes with major injuries and moderate injuries than urban areas.
- In both rural and urban areas, occupants that use no restraints are about four times more likely to suffer a fatality in an accident than occupants that use restraints (3.09 percent versus 0.83 percent for urban areas, and 3.14 percent versus 0.79 percent for rural areas, respectively).
- In both rural and urban areas, the highest percentage of crashes with an injury or fatality occurs on state highways, followed by local roads or streets.
- In both rural and urban areas, males are two times more likely than females to be in a crash with a fatality.

2011-2015 Pennsylvania Injury and Fatal Crashes by Urban-Rural and Maximum Severity of Crash

Maximum Severity of Crash	Urban	Percent	Rural	Percent	Statewide Total
Fatal	3,056	53.5%	2,655	46.5%	5,712
Major Injury	8,387	62.3%	5,077	37.7%	13,464
Moderate Injury	34,941	68.4%	16,153	31.6%	51,100
Minor Injury	108,150	73.6%	38,885	26.4%	147,037
Statewide Total	154,534	71.1%	62,770	28.9%	217,313



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The Center for Rural Pennsylvania is a bipartisan, bicameral legislative agency that serves as a resource for rural policy within the Pennsylvania General Assembly. It was created in 1987 under Act 16,

the Rural Revitalization Act, to promote and sustain the vitality of Pennsylvania's rural and small communities.

Information contained in this report does not necessarily reflect the views of individual board members or the Center for Rural Pennsylvania. For more information, contact the Center for Rural Pennsylvania, 625 Forster St., Room 902, Harrisburg, PA 17120, telephone (717) 787-9555, email: info@rural.palegislature.us, www.rural.palegislature.us.

- Drugs and/or alcohol were not suspected in the majority of fatal crashes in both rural and urban Pennsylvania.
- About 94 percent of all injury and fatal crashes in rural areas occur in townships of the second class. This result was not surprising since these municipalities cover about 98 percent of rural Pennsylvania and include 88 percent of the rural population. In urban areas, a plurality of injury and fatal crashes occur in cities and townships of the second class.
- The largest percentages of injury and fatal crashes occur during daylight hours in both rural and urban areas. However, in rural areas, higher percentages of injury and fatal crashes occur on dark streets with no street lights than in urban areas.
- In both rural and urban areas, crashes on dry roads are more likely to involve a fatality than crashes on roads that are wet, snow covered, icy or slushy.
- In both rural and urban areas, the highest percentage of those involved in injury and fatal crashes are those aged 25 to 34. In rural areas, higher percentages of youth, aged 15 to 24, are involved in moderate and major injury and fatal crashes than youth, aged 15 to 24, in urban areas.
- Crash areas that are more than 31 minutes from a trauma center have more than two times the percent of fatalities as those within 15 minutes. This supports the “Golden Hour” concept in emergency medicine that suggests the first hour after the occurrence of a traumatic injury is the most critical for successful emergency treatment.

The full report, *Analysis of Pennsylvania Crash Statistics Data*, is available at www.rural.palegislature.us.

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